P-3 Orion 04/18/13

Aircraft:

P-3 Orion - WFF (See full schedule)

Flight Number:

2013 Operation IceBridge Arctic #1504

Payload Configuration:

2013 Operation IceBridge Arctic

Nav Data Collected:

No

Total Flight Time:

5.2 hours

Submitted by:

Kelly Griffin on 04/18/13

Flight Segments:

From:	BGSF	То:	BGTL			
Start:	04/18/13 11:45 Z	Finish:	04/18/13 16:59 Z			
Flight Time:	5.2 hours	5.2 hours				
Log Number:	<u>13P001</u>	PI:	Michael Studinger			
Funding Source:	Bruce Tagg - NASA - SMD - ESD Airborne Science Program					
Purpose of Flight:	Transit					
Comments:	2013 Operation IceBridge Greenland Deployment: Combination Science/Transit flight from Kangerlussuaq to Thule Air Base- no aircraft issues reported, data collection nominal.					

Flight Hour Summary:

	13P001
Flight Hours Approved in SOFRS	255
Total Used	211.6
Total Remaining	43.4

13P001 Flight Reports						
Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
03/14/13	2013 Operation IceBridge Arctic #1447	Check	0.8	0.8	254.2	
03/14/13	2013 Operation IceBridge Arctic #1449	Check	2.1	2.9	252.1	
03/15/13	2013 Operation IceBridge Arctic #1448	Check	4	6.9	248.1	
03/18/13	2013 Operation IceBridge Arctic #1450	Transit	7.9	14.8	240.2	
03/20/13	2013 Operation IceBridge Arctic #1468	Science	6.3	21.1	233.9	
03/21/13	2013 Operation IceBridge Arctic #1456	Transit	8.5	29.6	225.4	
03/22/13 - 03/23/13	2013 Operation IceBridge Arctic #1474	Science	8.2	37.8	217.2	
03/23/13	2013 Operation IceBridge Arctic #1470	Science	7.8	45.6	209.4	

03/24/13 - 03/25/13	2013 Operation IceBridge Arctic #1469	Science	8.4	54	201	
03/26/13	2013 Operation IceBridge Arctic #1475	Transit	8.6	62.6	192.4	
03/27/13	2013 Operation IceBridge Arctic #1476	Science	7.9	70.5	184.5	
03/28/13	2013 Operation IceBridge Arctic #1477	Science	3.3	73.8	181.2	
04/02/13	2013 Operation IceBridge Arctic #1486	Transit	6.4	80.2	174.8	
04/04/13	2013 Operation IceBridge Arctic #1484	Science	8.1	88.3	166.7	
04/05/13	2013 Operation IceBridge Arctic #1489	Science	7.8	96.1	158.9	
04/06/13	2013 Operation IceBridge Arctic #1487	Science	8	104.1	150.9	
04/08/13	2013 Operation IceBridge Arctic #1491	Science	7.5	111.6	143.4	
04/09/13	2013 Operation IceBridge Arctic #1493	Science	6.4	118	137	
04/10/13	2013 Operation IceBridge Arctic #1493	Science	6.6	124.6	130.4	
04/11/13	2013 Operation IceBridge Arctic #1495	Science	7.4	132	123	
04/12/13	2013 Operation IceBridge Arctic #1496	Science	6.2	138.2	116.8	
04/15/13	2013 Operation IceBridge Arctic #1502	Science	7.9	146.1	108.9	
04/18/13	2013 Operation IceBridge Arctic #1504	Transit	5.2	151.3	103.7	
04/19/13	2013 Operation IceBridge Arctic #1505	Science	7.4	158.7	96.3	
04/20/13	2013 Operation IceBridge Arctic #1508	Science	6.8	165.5	89.5	
04/22/13	2013 Operation IceBridge Arctic #1512	Science	7.8	173.3	81.7	
04/23/13	2013 Operation IceBridge Arctic #1513	Science	7.7	181	74	
04/24/13	2013 Operation IceBridge Arctic #1514	Science	8	189	66	
04/25/13	2013 Operation IceBridge Arctic #1515	Science	7.5	196.5	58.5	

04/26/13	2013 Operation IceBridge Arctic #1516	Science	7.1	203.6	51.4	
05/02/13	2013 Operation IceBridge Arctic	Transit	7.5	211.1	43.9	
05/02/13	2013 Operation IceBridge Arctic	Transit	0.5	211.6	43.4	

Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.

Related Science Report:

OIB - P-3 Orion 04/18/13 Science Report

Mission:

OIB

Mission Summary:

F19 Northwest Glaciers 02

Accomplishments

- Low-altitude survey (1,500 ft AGL) over the northwest coastal regions.
- ATM, snow and Ku-band radars, and DMS were operated on the survey lines.
- Ramp pass at Thule Air Base at 1,500 ft AGL for ATM and radar calibration.
- Conducted pitch maneuvers over the fjord for snow and Ku-band radar time stamp verification.
- Satellite Tracks: none.
- Repeat Mission: partial.

Instrument	Operated	Data Volume	Instrument Issues/Comments
ATM	yes	32 GB	None.
DMS	yes	37.3GB	None. Collected 5,718 frames on primary system.
Snow Radar	yes	170 GB	None.
Ku-band Radar	yes	170 GB	None.
Accumulation Radar	yes	90 GB	None.
MCoRDS	yes	480 GB	Recorded on 6 channels due to connector problem.
KT-19	yes	6.5 MB	None.

Mission Report (Michael Studinger, Mission Scientist)

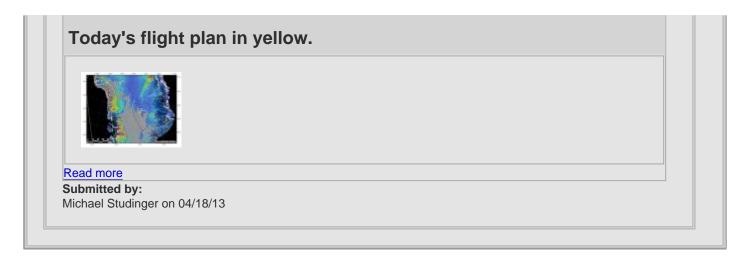
We modified the original mission plan in order to accommodate most of the line during the transit flight from Kangerlussuaq to Thule Air Base. We surveyed all 5 branches of the Upernavik Ice Stream, and then repeated a previously-flown inland line from the ?northwest coastal? suite of missions. We also re-surved the centerlines of the Tracy and Heilprin Glaciers, before landing at Thule Air Base.

The weather forecast and satellite imagery had some significant cloud cover near the coastal areas in the south. We were able to collect data over all 5 branches of the Upernavik Ice Stream and the remainder of the survey lines.

We collected 10 minutes of data at 1,500 ft AGL over the sea ice in Inglefield Bredning. At the request of CReSIS we collected snow, Ku-band and accumulation radar data from 1,500 ft AGL over snow-covered rocks on Saunders Island.

Data collection started 13:08 UTC and ended at 16:28 UTC. We collected 3.4 hours of science data.

Images:



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Page Editor: Katja Drdla

NASA Official: Marilyn Vasques

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